

REMARKS

Claims 30-45 are pending. Claims 30, 32, 37, 38, and 45 have been amended to correct typographical errors.

Claims 30-45 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Matsuura I (U.S. Patent No. 4,822,763), alone or in combination with Matsuura II (U.S. Patent No. 4,617,284), and/or Sasaki et al. (U.S. Patent No. 4,900,706).

In response, Applicants direct the Examiner's attention to Figs. A, B and C which compare the processes of present independent claims 30, 38 and Matsuura I, respectively (Attachment). The first step of Fig. A is reducing $Ti(OR^1)_aX_{4-a}$ to the Ti^{3+} -containing solid product, which product corresponds to (C) solid catalyst containing precursor containing magnesium, etc., and is quite the same as the first step in Fig. B.

It must also be noted that:

- (1) The above-mentioned first steps are a step of reducing a titanium compound, i.e., $Ti(OR^1)_aX_{4-a}$, with an organomagnesium compound in the presence of an organosilicon compound having a silicon-oxygen bond, and
- (2) The solid catalyst component precursor (C) is a Ti^{3+} -containing solid product. Therefore, the resulting solid catalyst component also contains Ti^{3+} .

In comparing Fig. C (i.e., the process of Matsurra I) to Figs. A and B, it can be seen that Matsuura I does not teach:

- (1) to utilize the first step of Figs. A and/or B, and
- (2) provide for Ti^{3+} , i.e., an essential component of the present invention.

Even if Matsurra I teaches to utilize a titanium compound (2) component having the same structure as present Formula (2), Matsurra I does not teach contacting that compound (2) component with the other components (1) and (3) to change that compound (2) of Formula (2) into a trivalent titanium atom-containing solid product. Specifically, while Matsurra I may teach to utilize a component having a similar structure to present Formula (2), there is neither a teaching, nor a suggestion to modify that compound into a trivalent titanium atom-containing solid product and contact that trivalent product with components (A) and (B) as recited by the claims.

As neither Matsurra II nor Sasaki et al. teach to contact a trivalent titanium atom-containing solid product, Applicants respectfully present that neither of the secondary references cure the deficiencies of Matsurra I alone.

In view of the above, it is respectfully submitted that all objections and rejections are overcome. Thus, a Notice of Allowance is respectfully requested.

Respectfully submitted,



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ATTACHMENT - Figs. A, B and C

Claim 30

Titanium compound, $Ti(OR^1)_aX_{4-a}$

reducing with organomagnesium compound (3), in the presence of organosilicon compound (1) having Si-O bond, wherein Ti^{+4} contained in $Ti(OR^1)_aX_{4-a}$ is reduced to Ti^{+3}

Ti^{+3} -containing solid product
= (C) solid catalyst component precursor containing Mg, etc

contacting with
(A) halogeno compound of 13 or 14 group, and
(B) electron donor selected from etc

Solid catalyst component for olefin polymerization, containing Ti^{+3}

Fig. A

Claim 38

Titanium compound, $Ti(OR^1)_aX_{4-a}$

reducing with organomagnesium compound (3), in the presence of organosilicon compound (1) having Si-O bond, wherein Ti^{+4} contained in $Ti(OR^1)_aX_{4-a}$ is reduced to Ti^{+3}

Ti^{+3} -containing solid product
= (C) solid catalyst component precursor containing Mg, etc

contacting with
(A') halogeno compound of 14 group, and
(B) electron donor selected from etc

Intermediate product

contacting with (D) compound having Ti-halogen bond

Solid catalyst component for olefin polymerization, containing Ti^{+3}

Fig. B

Claim 1 of '763 patent

- (i) contacting an alkoxymagnesiumhalide compound with a titanium compound containing OR¹ group,
- (ii) contacting a magnesium halide with a titanium tetraalkoxide and a polymeric silicon compound of the formula ---, or
- (iii) reacting an organomagnesium compound with a halogenating agent, a reducing agent or combination thereof



Product



contacting with a titanium compound containing OR¹ group



COMPONENT(A)
= solid catalyst component containing Ti, Mg and a halogen

contacting with
COMPONENT (B) acyl halide compound,
COMPONENT (C) OR² group-having compound selected from ---,
COMPONENT (D) silicon halide compound, and
COMPONENT (E) silicon compound of the formula ---

Contact product contained in catalyst component for olefin polymerization

Fig. C